

1 The present invention may be embodied in other specific forms without departing
2 from its spirit or essential characteristics. The described embodiments are to be
3 considered in all respects only as illustrative and not restrictive. The scope of the
4 invention is, therefore, indicated by the appended claims rather than by the foregoing
5 description. All changes which come within the meaning and range of equivalency of the
6 claims are to be embraced within their scope.

7 What is claimed and desired to be secured by United States Letters Patent is:

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1 1. A method for ensuring client access to unpaired messages from a server,
2 comprising:
3 the server detecting at least one unpaired message to be stored in a data structure;
4 creating the data structure in a server, the data structure configured to store a
5 plurality of unpaired messages intended for a client;
6 utilizing a protocol which allows the client to request at least one unpaired
7 message stored in the data structure.

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9 2. The method of claim 1, further comprising the server dynamically creating the
10 data structure in response to the server detecting at least one unpaired message.

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12 3. The method of claim 1, further comprising notifying the server of a client
13 request to enable dynamic creation of the data structure.

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15 4. The method of claim 3, wherein notifying the server occurs during
16 establishment of communications between the client and the server.

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18 5. The method of claim 1, further comprising the server notifying the client when
19 the data structure contains an unpaired message.

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21 6. The method of claim 1, further comprising:
22 generating a request message to be sent from the client to the server; and

1 storing an indicator in the request message to enable the client to distinguish
2 between unpaired messages.

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4 7. The method of claim 1, wherein utilizing the protocol further comprises
5 allowing the client to request automatic transmission of unpaired messages stored in the
6 data structure.

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8 8. A computer readable medium having stored thereon computer executable
9 instructions for performing a method for ensuring client access to unpaired messages
10 from a server, the method comprising:

11 the server detecting at least one unpaired message to be stored in a data structure;
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13 creating the data structure in a server, the data structure configured to store a
14 plurality of unpaired messages intended for a client;

15 utilizing a protocol which allows the client to request at least one unpaired
16 message stored in the data structure.

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18 9. The computer readable medium of claim 8, wherein the method further
19 comprising the server dynamically creating the data structure in response to the server
20 detecting at least one unpaired message.

1 10. The computer readable medium of claim 8, wherein the method further
2 comprising notifying the server of a client request to enable dynamic creation of the data
3 structure.

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5 11. The computer readable medium of claim 10, wherein notifying the server
6 occurs during establishment of communications between the client and the server.

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8 12. The computer readable medium claim 8, wherein the method further
9 comprising the server notifying the client when the data structure contains an unpaired
10 message.

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12 13. The computer readable medium of claim 8, wherein the method further
13 comprising:

14 generating a request message to be sent from the client to the server;
15 storing an indicator in request message to enable the client to distinguish between
16 unpaired messages.

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18 14. The computer readable medium of claim 8, wherein utilizing the protocol
19 further comprises allowing the client to request automatic transmission of unpaired
20 messages stored in the data structure.

1 15. A system for ensuring client access to unpaired messages from a server
2 comprising:
3 a request module configured to receive a client request;
4 a response generator which receives the client request from the request module
5 and generates an appropriate response;
6 an unpaired message module which analyzes the response message generated by
7 the response generator and configured to distinguish a paired message from an unpaired
8 message and to store paired messages in a paired response data structure and unpaired
9 messages in an unpaired response data structure; and
10 a response module which communicates paired and unpaired messages to a
11 client.

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13 16. The system of claim 15, wherein the unpaired message module is further
14 configured to dynamically create the unpaired response data structure in response to a
15 first unpaired response message.

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17 17. The system of claim 15, wherein the response module is configured to
18 automatically send all unpaired messages stored in the unpaired response data structure.

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20 18. The system of claim 15, wherein the response module is configured to send
21 all unpaired messages stored in the unpaired response data structure in response to a
22 request from the client.

1 19. The system of claim 15, wherein the system is activated upon the server
2 receiving an activation request from the client.

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4 20. The system of claim 15, wherein the response module notifies the client when
5 the unpaired response data structure contains at least one unpaired message.

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